

REMARKS

At the outset, the Examiner is thanked for the review and consideration of the present application. Claims 1-17 are now pending in the application. Claims 2-8 and 11-17 were indicated as being allowable. However, for the reasons stated below, all of the claims in this application are believed to be in condition for allowance.

35 U.S.C. § 102 Rejections

Claims 1 and 9-10 stand rejected under 35 U.S.C. §102(e) as being anticipated by Subrahmanya reference (U.S. Pub-20040125771). Subrahmanya discloses a method for adapting a filter by estimating filter coefficients based on the speed of a mobile unit. The Applicant respectfully traverses the rejections at least in view of the reasons provided below.

Regarding Claim 1, the method disclosed in the present application comprises the steps of receiving a signal corresponding to a mobile unit transmitting signal, generating a first signal by using a first filter unit to filter said signal, and obtaining a first speed by estimating said movement speed based on said first signal. The Examiner states that the above steps are disclosed in Figs.3-5 of Subrahmanya. Actually, Subrahmanya teaches a method for **estimating the coefficients of the filter**, rather than estimating the speed of the mobile unit. Subrahmanya discloses a method for determining the coefficients of the filter based on the speed of the mobile unit and the noise power estimate. As for the method of estimating the speed of the mobile unit, Subrahmanya only has a brief comment in paragraph 70, and according to paragraph 70 of Subrahmanya, the speed is determined by measuring two locations of the mobile unit and their respective times, which is totally different from the method contemplated by the present

invention. In other words, Subrahmanya discloses a method for determining the coefficients of the filter based on the speed of the mobile unit, and on the contrary, the present invention comprises a method for determining the speed of the mobile speed by using two filter units to filter the signal corresponding to the mobile unit. Therefore, Claim 1 is patentable over Subrahmanya.

Regarding Claim 9, the system for estimating the speed of a mobile unit disclosed in the present application comprises a receiving unit for receiving a signal corresponding to the mobile unit, two filter units for filter the signal to generate a first signal and a second signal, an estimated unit for obtaining a first speed and a second speed based on the first speed and the second speed, and a selecting unit for selecting one of the first speed and the second speed to be the speed of the mobile unit. For similar reasons as those mentioned above, Subrahmanya does not disclose how to obtain the speed of the mobile unit based on the signals filtered by the filter units. On the contrary, Subrahmanya discloses how to obtain the coefficients of the filter unit based on the speed of the mobile unit, and the speed of the mobile unit is estimated simply by measuring two locations of the mobile unit and their respective times.

Therefore, the Applicant respectfully submits that there is no teaching, suggestion, or motivation in Subrahmanya supporting that estimating the speed of a mobile unit is based on the signals filtered by the filters. In other words, the method disclosed by Subrahmanya is not anticipatory over the Applicant's method and system.

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The Applicant respectfully submits that independent Claims 1 and 9 are allowable over the cited art. In addition, Claims 2-8, 10-17, which directly or indirectly depend on patentable Claims 1 and 9 and further limit the scope, are believed also to be patentable.

Conclusion

In light of the above remarks, the Applicant respectfully submits that all the pending claims in this case are in condition for allowance, and respectfully request the withdrawal of the rejections. Should the Examiner have any questions or determine that any further action is desirable to place this application in even better condition for issue, the Examiner is encouraged to telephone Applicant's undersigned representative at the number listed below.

PILLSBURY WINTHROP SHAW PITTMAN LLP
1650 Tysons Boulevard
McLean, VA 22102
Tel: 703/770-7900

Respectfully submitted,

BAO-CHI PENG



By:

Michael Bednarek
Registration No. 32,329

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MB/LDE/ggb

Customer No. 28970